

Chapter 7

THE FRAMEWORK: STANDARDS 1-5

(The Process Standards)

Introduction

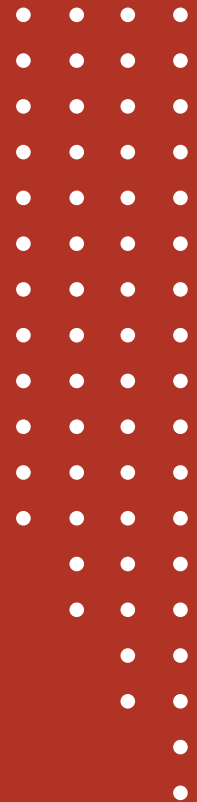
Standard 1: Systems

Standard 2: Science as Inquiry

Standard 3: Science as a Human Activity

Standard 4: Science and Technology

Standard 5: Science and Mathematics



INTRODUCTION

In the introductory statement that accompanies New Jersey’s *Core Curriculum Content Standards*, standards are described as “what students should know and be able to do in specific academic areas and across disciplines.” The twelve *Science Standards* can easily be separated into two equally important categories that reflect this description.

Science Standards 6 through 12, while providing for the development of investigative skills, basically serve to define what students should know about life, physical, earth, and environmental science and can be referred to in the strictest sense as “content standards.” *Science Standards 1 through 5*, however, speak in a more general sense to the nature of science and scientific inquiry. These five “process standards” address not only what students should be able to do as they learn and practice any science but also what they should know and understand about the interaction of science with the human experience—both now and in the past.

This chapter discusses each of those first five standards, emphasizing their necessary role in an effective science program. A careful examination of each process standard and the cumulative progress indicators (CPIs) that accompany it will leave the reader with a clear sense of its importance and meaning.

Chapter 8 of the *New Jersey Science Curriculum Framework* features hundreds of learning activities that illustrate the seven content standards. These activities have been cross-referenced to the five process standards. As teachers experiment with the suggested activities, they will quickly see the meaningful integration of science content and the evolution of process skills.

The purpose of this chapter, then, is to provide a concise overview of the five interdisciplinary process standards, which are cited throughout chapter 8 where they relate to the sample learning activities.